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# EVIDENCE FOR CONTRACEPTIVE OPTIONS AND HIV OUTCOMES (ECHO) TRIAL

## Study Background

The ECHO trial was a three-year, randomized clinical trial that was conducted to compare three methods of contraception—the intramuscular injectable depot-medroxyprogesterone acetate (DMPA-IM), the levonorgestrel (LNG) implant, and the copper intrauterine device (Cu IUD)—to assess whether the risk of acquiring HIV differs with use of these methods. The trial was designed to detect a 50 percent increase in new HIV infections for each of the three contraceptive methods compared to each other method.

Results from the trial were published in *The Lancet* and announced on June 13, 2019 in Durban, South Africa. The ECHO study also compared side effects, pregnancy rates, and women’s patterns of use between methods.

The ECHO trial was conducted in eSwatini, Kenya, South Africa, and Zambia. The trial enrolled 7,829 sexually-active, HIV-negative women ages 16 to 35 who were seeking contraception. Women who decided to enroll in the trial were randomly assigned to one of the three contraceptive methods. All participants received counseling on contraceptive methods and comprehensive HIV preventive services. Study sites began providing participants with pre-exposure prophylaxis once introduced in country national policies.

The trial was coordinated by FHI360, University of Washington, Wits Reproductive Health and HIV Institute, and the World Health Organization (WHO) in partnership with research institutions in each participating country.

## ECHO RESULTS

The trial did not find a substantial difference in HIV risk among the methods evaluated: no method showed a 50 percent increase in HIV risk compared to the other two.

DMPA IM compared with Cu IUD: hazard ratio (HR) 1.04 (96% CI 0.82-1.33, p=0.72)

DMPA-IM compared with LNG implant: HR 1.23 (96% CI 0.95-1.59, p=0.097)

Cu IUD compared with LNG implant: HR 1.18 (96% CI 0.91-1.53, p=0.19)

All the contraceptive methods studied in the trial (DMPA IM, LNG implant, and the Cu IUD) are generally safe, effective, and were well-accepted by the women using them. All three methods had high contraceptive effectiveness, with pregnancy rates of about 1% or less per year.

The rate of HIV incidence was consistently high among women who participated in the study, regardless of the contraceptive method used. Overall HIV incidence was 3.81 per 100 woman-years.

## PROGRAMMATIC IMPACT

Persistent and unacceptably high HIV rates in many communities around the world necessitate the need to scale up HIV prevention activities for women and effectively integrate HIV prevention services within family planning programs and other platforms that reach adolescent girls and young women. Women who seek family planning and HIV testing services should receive HIV risk screening and prevention information and be advised that dual method use (condoms plus an effective contraceptive method) is the best option to prevent both sexually transmitted infections (STI)/HIV and unintended pregnancy. Pre-exposure prophylaxis (PrEP) counseling and services should be part of a comprehensive approach for women at risk of HIV or other sexually transmitted infections.

There is also a need to improve contraceptive options for women and couples as some family planning programs continue to rely on a limited method mix. Expanding contraceptive method choices will better address the reproductive preferences and needs of women and their partners as well as those impacted by HIV. Having a wide range of contraceptives can also help reduce family planning program vulnerabilities caused by a limited method mix and fluctuations in contraceptive supply and availability.

## WHO GUIDANCE POST ECHO TRIAL RESULTS

Following analysis of findings from ECHO trial, as well as other sources, on August 29, 2019 the World Health Organization (WHO) released an update on the contraceptive medical eligibility for women at high risk of acquiring HIV. Per the new guidance, progestogen-only injectables and intrauterine devices were changed from a Medical Eligibility Criteria (MEC) Category 2 to Category 1. A MEC Category 1 indicates that women can use the contraceptive method in all circumstances.

In addition to the updated MEC, the new WHO Guidance Statement includes several key messages for policymakers, program managers, and health care providers on FP/HIV programming and services:

- A woman's risk of HIV should not restrict her contraceptive choice.
- Efforts to expand access to family planning and contraceptive options must continue.
- A renewed emphasis on HIV and Sexually Transmitted Infections (STIs) prevention services is urgently needed.
- In settings with high HIV prevalence, HIV testing and prevention should be integrated into FP services.

For more information, please view the [WHO webinar](#) and the [WHO 2019 Updated MEC Guidance](#).

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## RESOURCES

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(19\)31288-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)31288-7/fulltext)

<http://echo-consortium.com/>

<https://resultsforinformedchoice.org/>

[https://www.who.int/reproductivehealth/publications/family\\_planning/Ex-Summ-MEC-5/en/](https://www.who.int/reproductivehealth/publications/family_planning/Ex-Summ-MEC-5/en/)